

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (canceled).

2. (amended) [A surface acoustic wave device according to claim 1, wherein] A surface acoustic wave device comprising:

a LiTaO₃ substrate; and

an interdigital transducer provided on the LiTaO₃ substrate, said interdigital transducer containing Au as a major component; wherein

said interdigital transducer has a normalized film thickness H/λ within a range of approximately 0.001 to approximately 0.05 so as to excite a shear horizontal wave; and

[said interdigital transducer includes Au as a major component,] said substrate has Euler angles of approximately (0° , $125^\circ - 146^\circ$, $0^\circ \pm 5^\circ$).

3. (amended) [A surface acoustic wave device according to claim 1, wherein] A surface acoustic wave device comprising:

a LiTaO₃ substrate; and

an interdigital transducer provided on the LiTaO₃ substrate; wherein

said interdigital transducer has a normalized film thickness H/λ within a range of approximately 0.002 to approximately 0.05 so as to excite a shear horizontal wave;

said interdigital transducer includes Ag as a major component[,]; and

said substrate has Euler angles of approximately (0° , $125^\circ - 140^\circ$, $0^\circ \pm 5^\circ$)[, and said normalized film thickness H/λ is within the range of approximately 0.002 to 0.05].

4. (amended) [A surface acoustic wave device according to claim 1, wherein] A surface acoustic wave device comprising:

a LiTaO₃ substrate; and
an interdigital transducer provided on the LiTaO₃ substrate; wherein
said interdigital transducer has a normalized film thickness H/λ within a range of
approximately 0.002 to approximately 0.05 so as to excite a shear horizontal wave;
said interdigital transducer includes Ta as a major component[,]; and
said substrate has Euler angles of approximately (0°, 125° - 140°, 0°± 5°)[, and
said normalized film thickness H/λ is within the range of approximately 0.002 to 0.05].

5. (amended) [A surface acoustic wave device according to claim 1, wherein] A surface acoustic wave device comprising:

a LiTaO₃ substrate; and
an interdigital transducer provided on the LiTaO₃ substrate; wherein
said interdigital transducer has a normalized film thickness H/λ within a range of
approximately 0.005 to approximately 0.05 so as to excite a shear horizontal wave;
said interdigital transducer includes Mo as a major component[,]; and
said substrate has Euler angles of approximately (0°, 125° - 134°, 0°± 5°)[, and
said normalized film thickness H/λ is within the range of approximately 0.005 to 0.05].

6. (amended) [A surface acoustic wave device according to claim 1, wherein] A surface acoustic wave device comprising:

a LiTaO₃ substrate; and
an interdigital transducer provided on the LiTaO₃ substrate; wherein
said interdigital transducer has a normalized film thickness H/λ within a range of
approximately 0.003 to approximately 0.05 so as to excite a shear horizontal wave;
said interdigital transducer includes Cu as a major component[,]; and
said substrate has Euler angles of approximately (0°, 125° - 137°, 0°± 5°)[, and
said normalized film thickness H/λ is within the range of approximately 0.003 to 0.05].

7. (amended) [A surface acoustic wave device according to claim 1, wherein] A surface acoustic wave device comprising:

a LiTaO₃ substrate; and
an interdigital transducer provided on the LiTaO₃ substrate; wherein
said interdigital transducer has a normalized film thickness H/λ within a range of
approximately 0.006 to approximately 0.05 so as to excite a shear horizontal wave;
said interdigital transducer includes Ni as a major component[.]; and
said substrate has Euler angles of approximately (0° , $125^\circ - 133^\circ$, $0^\circ \pm 5^\circ$)[, and
said normalized film thickness H/λ is within the range of approximately 0.006 to 0.05].

8. (amended) [A surface acoustic wave device according to claim 1, wherein] A surface acoustic wave device comprising:

a LiTaO₃ substrate; and
an interdigital transducer provided on the LiTaO₃ substrate; wherein
said interdigital transducer has a normalized film thickness H/λ within a range of
approximately 0.003 to approximately 0.05 so as to excite a shear horizontal wave;
said interdigital transducer includes Cr as a major component[.]; and
said substrate has Euler angles of approximately (0° , $125^\circ - 147^\circ$, $0^\circ \pm 5^\circ$)[, and
said normalized film thickness H/λ is within the range of approximately 0.003 to 0.05].

9. (amended) [A surface acoustic wave device according to claim 1, wherein] A surface acoustic wave device comprising:

a LiTaO₃ substrate; and
an interdigital transducer provided on the LiTaO₃ substrate; wherein
said interdigital transducer has a normalized film thickness H/λ within a range of
approximately 0.003 to approximately 0.05 so as to excite a shear horizontal wave;
said interdigital transducer includes Zn as a major component[.]; and

said substrate has Euler angles of approximately $(0^\circ, 125^\circ - 138^\circ, 0^\circ \pm 5^\circ)$ [, and
said normalized film thickness H/λ is within the range of approximately 0.003 to 0.05].

10. (amended) [A surface acoustic wave device according to claim 1, wherein] A surface acoustic wave device comprising:

a LiTaO₃ substrate; and

an interdigital transducer provided on the LiTaO₃ substrate; wherein

said interdigital transducer has a normalized film thickness H/λ within a range of approximately 0.002 to approximately 0.05 so as to excite a shear horizontal wave;

said interdigital transducer includes W as a major component[.]; and

said substrate has Euler angles of approximately $(0^\circ, 125^\circ - 138^\circ, 0^\circ \pm 5^\circ)$ [, and
said normalized film thickness H/λ is within the range of approximately 0.002 to 0.05].

11. (canceled).

12. (issued) A communication device including the surface acoustic wave device according to claim 2.

13. (issued) A communication device including the surface acoustic wave device according to claim 3.

14. (issued) A communication device including the surface acoustic wave device according to claim 4.

15. (issued) A communication device including the surface acoustic wave device according to claim 5.

16. (issued) A communication device including the surface acoustic wave device according to claim 6.

17. (issued) A communication device including the surface acoustic wave device according to claim 7.

18. (issued) A communication device including the surface acoustic wave device according to claim 8.

19. (issued) A communication device including the surface acoustic wave device according to claim 9.

20. (issued) A communication device including the surface acoustic wave device according to claim 10.

21. (new) A surface acoustic wave device comprising:
a LiTaO₃ substrate; and
an interdigital transducer provided on the LiTaO₃ substrate, said interdigital
transducer containing as a major component at least one of Au, Ag, Ta, Mo, Cu, Ni, Cr,
Zn, and W; wherein
said interdigital transducer has a normalized film thickness H/λ within a range of
approximately 0.001 to approximately 0.05;
the substrate has Euler angles of approximately (0°, 136° to 147°, 0°±5°).

22. (canceled).

23. (new) A surface acoustic wave device according to claim 21, wherein the
substrate has Euler angles of approximately (0°, 136° to 137°, 0°±5°).

24. (new) A surface acoustic wave device according to claim 21, wherein the
substrate has Euler angles of approximately (0°, 136.5°, 0°±5°).

25. (new) A surface acoustic wave device according to claim 21, wherein the normalized thickness H/λ is within a range of approximately 0.03 to approximately 0.05.

26. (new) A surface acoustic wave device according to claim 21, wherein the normalized thickness H/λ is approximately 0.04.

27. (new) A surface acoustic wave device according to claim 21, wherein the major component is Cu;

the normalized thickness H/λ is within a range of approximately 0.03 to approximately 0.05; and

the substrate has Euler angles of approximately $(0^\circ, 136^\circ \text{ to } 137^\circ, 0^\circ \pm 5^\circ)$.

28. (new) A surface acoustic wave device according to claim 21, wherein the major component is Cu;

the normalized thickness H/λ is approximately 0.04; and

the substrate has Euler angles of approximately $(0^\circ, 136^\circ \text{ to } 137^\circ, 0^\circ \pm 5^\circ)$.

29. (new) A surface acoustic wave device according to claim 21, wherein the major component is Cu;

the normalized thickness H/λ is within a range of approximately 0.03 to approximately 0.05; and

the substrate has Euler angles of approximately $(0^\circ, 136.5^\circ, 0^\circ \pm 5^\circ)$.

30. (new) A surface acoustic wave device according to claim 21, wherein the major component is Cu;

the normalized thickness H/λ is approximately 0.04; and

the substrate has Euler angles of approximately $(0^\circ, 136.5^\circ, 0^\circ \pm 5^\circ)$.

31. (new) A surface acoustic wave device according to claim 21, wherein the major component is Cu; and

the substrate has Euler angles of approximately (0°, 136° to 137°, 0°±5°).

32. (new) A surface acoustic wave device according to claim 21, wherein the major component is Cu; and

the substrate has Euler angles of approximately (0°, 136.5°, 0°±5°).